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PLANT IMMIGRANTS.

No. 157. MAY, 1919.

GENERA REPRESENTED IN THIS NUMBER.

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Foreign Seed and Plant Introduction.

EXPLANATORY NOTE.

This multigraphed circular is made up of descriptive notes furnished mainly by Agricultural Explorers and Foreign Correspondents relative to the more important introduced plants which have recently arrived at the Office of Foreign Seed and Plant Introduction of the Bureau of Plant Industry of the Department of Agriculture, together with accounts of the behavior in America of previous introductions. Descriptions appearing here are revised and published later in the INVENTORY OF PLANTS IMPORTED.

Applications for material listed in these pages may be made at any time to this Office. As they are received they are placed on file, and when the material is ready for the use of experimenters it is sent to those on the list of applicants who can show that they are prepared to care for it as well as to others selected because of their special fitness to experiment with the particular plants imported. Do not wait for the annual catalogue entitled NEW PLANT INTRODUCTIONS which will be sent you in the autumn and in which will be listed all plants available at that time. Regular requests checked off on the check list sent out with the catalogue are not kept over from year to year. If you are especially interested in some particular plant in the catalogue write and explain in detail your fitness to handle it.

One of the main objects of the Office of Foreign Seed and Plant Introduction is to secure material for plant experimenters, and it will undertake as far as possible to fill any specific requests for foreign seeds or plants from plant breeders and others interested.

David Fairchild,

Agricultural Explorer in Charge.

May 31, 1919.

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Amorphophallus konjac (Araceae), 47226. **Konyaku.** From Japan. Tubers collected by Mr. Walter T. Swingle, Bureau of Plant Industry. "Starch from these tubers is used for food in Japan. During the war the starch prepared from this plant was exported to the United States,- it is said to be used in treating aeroplane wings. In Japan, **konyaku** is grown under the shade of orange trees, and as it seems to be important both for food and for industrial starch, I am anxious to see what it will do in this country." (Swingle.)

Annona senegalensis (Annonaceae), 47214. **Abo.** From Southern Provinces, Nigeria. Seeds presented by Mr. A. H. Kirby, Asst. Director of Agriculture, Ibadan. "No European production in any way resembles the *Annona senegalensis,* with its large, blue-green leaf and its small fruit. The fruit contains an aromatic, dark red pulp, and in a modest degree displays something of that captivating quality which has exalted its kindred plant, the cherimoya of Peru, to its high repute as the queen of fruits. It must be owned, however, that it is difficult to secure a well-developed example of this fruit, for so keenly is it spied out and devoured by the birds that often for months together it may be sought in vain." (Dr. George Schweinfurth, The Heart of Africa, p. 222.) See S. P. I. No. 46630 for previous introduction.

Barosma crenulata (Rutaceae), 47221 & 47222. **Buchu.** From Cape Town, Union of South Africa. Seeds presented by the Conservator of Forests. A small evergreen shrub, with opposite or alternate, simple, dotted, leathery leaves, in the axils of which the flowers appear. The **buchu** leaves of commerce are procured chiefly from *B. crenulata, B. crenata,* and *B. serratifolia.* The leaves are much used in medicine as a stimulant and tonic, and appear to have a specific effect in chronic diseases of the bladder, their action probably being dependent on the powerfully smelling, volatile oil which they contain. (Adapted from Lindley, Treasury of Botany, p. 125.)

Berberis polyantha (Berberidaceae), 47299. **Barberry.** From Wisley, Surrey, England. Plants presented by Mr. Fred J. Chittenden, Director of the Royal Horticultural Society's Gardens. A deciduous shrub, 6 to 10 feet high, with simple or three-pronged thorns, obovate leaves, mostly rounded at the apex, and yellow flowers

which are produced during June and July in drooping panicles carrying from 20 to over 50 blossoms. The fruit is red. This is a very fine species, remarkable for the large and abundant flower panicles. (Adapted from Bean, Trees and Shrubs Hardy in the British Isles, vol. 1, p. 246.)

Berberis rubrostilla (Berberidaceae), 47300. **Barberry.** From Wisley, Surrey, England. Plants presented by Mr. Fred J. Chittenden, Director of the Royal Horticultural Society's Gardens. "An elegant and beautiful seedling barberry of unrecorded parentage, but probably a hybrid between *B. wilsonae* and *B. concinna.* It has the growth of the latter, but has large pendent fruits of a rich coral-red color. A very pretty and useful addition to our fruiting shrubs." (Gardeners' Magazine, vol. 59, p. 449.)

Cordeauxia edulis (Caesalpiniaceae), 47213. **Yeheb nut.** From Aden, Arabia. Seeds presented by Mr. A. C. Watson, American vice consul. "The **yeheb nut** is produced by an evergreen shrub 4 to 6 feet high. It forms a staple food of the people of Somaliland (East Africa) and during certain seasons the Arabs are said to stew it and eat it in preference to dates or rice. Being evergreen and coming from a frostless region, it will probably prove to be tender. Its compound leaves are covered on the under side with glandular hairs which stain one's fingers a magenta color. In composition the **yeheb nut** resembles the chestnut quite closely and as a food it may be comparable to it in value. Being a desert species and yet able to stand humid weather, it may prove of unusual interest if it can be grown extensively on the dry lands of Florida, for example. It is said to form a tap root very quickly and thus establish itself; but how long it takes to come into bearing is not known." (Fairchild.)

"The small flowers are borne in terminal corymbs and are followed by the coriaceous, one-seeded pods. The ovoid seeds, which are from 1 to 2 inches long, are greatly valued by the natives for food. In preparing the nuts for use, it is desirable that they should be soaked in just such a quantity of water as they can absorb, since if more be used there is danger of loss of the sugars, which would diffuse into the excess of water. The following analysis of the kernels gives a good idea of the food value of these nuts:

	Per cent
Moisture	9.3
Ash	3
Sugars (Reducing)	2
(Cane)	2.6
Carbohydrates (other than sugars) by difference	37
Proteids (Albuminoids)	11.8
(Amides)	1.3
Fibre	2.7
Oil	10
Nutrient ratio	6.5
Nutrient value	93

The nuts were tested for alkaloids and glucosides, but no indication of the presence of such constituents was obtained. The results of the analysis indicate that the nuts are likely to prove a useful food. A satisfactory point is the presence of considerable quantities of sugars and oil. Judging from the analytical figures alone the nutrient ratio, i.e. the ratio of albuminoids to carbohydrates and oil converted into their starch equivalents, is very serviceable one, and the total nutrient value high. The kernels are rather tough and this point raises some doubt as to the complete digestibility of the carbohydrates other than sugars." (Kew Bulletin of Miscellaneous Information, 1908, pp. 36, 43.) See S. P. I. No. 43860 for previous introduction.

47315. *Dialium divaricatum* (Caesalpiniaceae). From Boliver, Colombia. Fruits collected by Mr. H. M. Curran at Tierras de Loba. "The wood is used for general construction requiring strength. The bark is used for medicinal purposes. Native to the northern states of Brazil." (Correa, Flora de Brazil, p. 41.)

A tree with alternate, pinnately trifoliolate leaves, the leaflets being ovate and about 2 inches long. The flowers are borne in erect terminal panicles and are followed by smooth, brown, pear-shaped fruits the size of a hazel nut. The seeds are surrounded by a pleasantly acid pulp much resembling that of the tamarind, to which this species is closely related. (Adapted from Nahl, Enumeratio Plantarum, vol. 1, p. 305.)

Erythrina variegata (Fabaceae), 47207. **Dapdap.** From Los Banos, Philippine Islands. Seeds collected by Mr. Nemesio Catalan and presented by Dr. E. B. Copeland, of College Farm. "A tree with brilliant red flowers which form a very showy inflorescence. Collected from tree on College Farm." (Catalan.)

"If hardy in south Florida it may prove larger and more showy than the other species of Erythrina grown there." (Fairchild.)

Kokia drynarioides (Malvaceae), 47223. From Pukoo, Mapulehu, Molokai, Hawaiian Islands. Seeds presented by Mr. J. F. Rock, Honolulu. "A tree 4 to 8 meters high, woody throughout, with large lobed leaves and bright red flowers of silky texture, occurring singly in the axils of the uppermost leaves. The thick, woody capsule, about an inch in length, contains several obovoid seeds which are thickly covered with short, reddish brown hairs. Of this exceedingly interesting species there has been only one tree in existence up to a few months ago. This same tree, which was declared dead, still showed some signs of life and produced a few capsules with mature seeds; but this is evidently the last, only a small branchlet having produced a few leaves." (J. F. Rock, The Indigenous Trees of the Hawaiian Islands, p. 307, 1913.)

"An almost extinct species of tree of the mallow family, which, because of its relationship with the cotton plant and its possible value for hybridization purposes, has been thought important to rescue from extinction. Seeds of this species received from Mr. Rock have been propagated by this Office and the plants grown from them have been distributed to all such Botanic Gardens in various parts of the world as are situated in regions where the species has a chance of succeeding. Reports received indicate that a number of these are growing. A tree at Miami, Florida, is now four feet high." (Fairchild.)

Pahudia rhomboidea (Caesalpiniaceae), 47210. From Los Banos, Philippine Islands. Seeds collected by Mr. Nemesio Catalan and presented by Dr. E. B. Copeland, of College Farm. "**Tindalo.** A tree that usually occurs in somewhat open situations of low elevation. The wood is very durable and beautifully colored; it is used for finer constructions, and is one of the best Philippine woods. Collected from Mount Maquiling." (Catalan.)

Phoenix dactylifera (Phoenicaceae), 47229. **Date palm.** From Tripoli. Seeds presented by Dr. O. Fenzi, Director, Stabilimento Orticolo Libico, Tripoli, Tripoli. "**Tabuni.** Season, late August to mid-December. The commonest kind in the Oasis of Tripoli; fruit small to medium in size, olive shaped, with very thin skin, pulp fiberless and more sugary than 'Bayudi.'" (Fenzi.)

Phoenix dactylifera (Phoenicaceae), 47302. **Date palm.** From Tripoli. Seeds presented by Dr. O. Fenzi, Director, Stabilimento Ortico Libico, Tripoli, Tripoli. "**Bayudi.** Ripening as early as August. Fruit large, cylindrical; pulp rather sweet, but somewhat fibrous." (Fenzi.)

Phoenix dactylifera (Phoenicaceae), 47303. **Date palm.** From Tripoli. Seeds presented by Dr. O. Fenzi, Director, Stabilimento Orticolo Libico, Tripoli, Tripoli. "**Bronsi.** One of the latest varieties, rarely ripening before October. Fruits large to very large, bright crimson in color, turning to shining black at maturity; pulp of extra good quality." (Fenzi.)

Prunus serrulata (Amygdalaceae), 47132-45. **Flowering cherry.** From Japan. Cuttings purchased from the Yokohama Nursery Company, Yokohama.

Ariyake. (47132). Branches brown-gray, young leaves yellow-brown, inflorescence in two- to four-flowered long-pedunculate false umbels, blossoms white or delicate pink. Single and slightly double blossoms appear on the same tree. Blossoms in mid-April. (Adapted from Miyoshi, Japanische Bergkirschen, p. 98, under *P. serrulata* f. *candida*.) "Flowers pale pink, single or semi-double, very large and fragrant. This is a very striking form." (Wilson, The Cherries of Japan, p. 51, under *P. lannesiana*, f. *ariake*.)

Choshu-hizakura. (47133). A medium-sized tree with spreading top, brown-gray twigs, young leaves deep red, inflorescence in two- to four-flowered pedunculate umbels or corymbs, flowers 4 centimeters (1½ in.) in diameter and uniformly rose-color. The red young leaves and rose-colored flowers make this cherry very attractive. Blossoming time, mid-April. (Adapted from Miyoshi, Japanische Bergkirschen p. 121, under *P. serrulata* f. *splendens*.) "Flowers pink, single or semi-double. This form is of little horticultural interest." (Wilson, The Cherries of Japan, p. 51. & Suppl. *ii*. under *P. serrulata* var. *sachalinensis*, f. *chosiuhizakura*.)

Fugenzo. (47134). A medium-sized tree with long, pendent inflorescences, two green leaflets in the flower-bud, and striking full-blown flowers, red at first, soon becoming white. The flower buds open one after another thus prolonging the blossoming time usually to the first of May. I have seen the last flower as late as the first of June. (Adapted from Miyoshi, Japanische Bergkirschen, p. 123, under *P. serrulata*, f. *classica*.) "One of the most beautiful of all cherries and now well known in gardens under the name of **James H. Veitch**. The flowers are rose-pink and the variety is distinguished by the presence of two leafy carpels in the center of each flower. Its Japanese name is **Kofugen** or **Benifugen**, and this and its white form (*albo-rosea*) are the only kinds of Japanese cherries which have green and leafy carpels." (Wilson, The Cherries of Japan, p. 39, under *P. serrulata*, var. *sachalinensis*, f. *fugenzo*.)

Horinji. (47135). A small tree with dark gray twigs, yellowish brown young leaves and flowers with roundish petals, the outer rank pink, the inner rank white. Blossoming time from the middle to the end of April. (Adapted from Miyoshi, Japanische Bergkirschen, p. 110, under *P. serrulata*, f. *decora*.) "This is a very beautiful form, with clusters of pale pink, double or semidouble flowers." (Wilson, The Cherries of Japan, p. 40, under *P. serrulata*, var. *sachalinensis*, f. *horinji*.)

Kan-zakura. (47136). "Flowers single, pale pink and rather small. A curious cherry which blooms in late winter, hence its Japanese name **Kan-zakura**, i.e. 'Winter Cherry.'" (Wilson, The Cherries of Japan, p. 31, under *P. serrulata*, var. *spontanea*, f. *praecox*.)

Kokonoye. (47137). A small tree with erect, slender branches, light gray twigs, brownish green young leaves, inflorescence in two- to four-flowered pedunculate umbels or false umbels with uniformly pink flowers. Blossoms in mid-April. (Adapted from Miyoshi, Japanische Bergkirschen, p. 107, under *P. serrulata*, f. *homogena*.) "Flowers pink, double or semidouble, on long pedicels, the peduncle is usually short." (Wilson, The Cherries of Japan, p. 40, under *P. serrulata*, var. *sachalinensis*, f. *homogena*.)

Kongosan. (47138). "Flowers pink, single. This form is of little horticultural interest." (Wilson, The Cherries of Japan, p. 52, under *P. lannesiana*, f. *kongosan*.)

Oshima-zakura. (47139). A large tree with young leaves delicate brown turning to green, green peduncles, green calyces, and large, white, fragrant flowers in four- to five-flowered corymbs. (Adapted from Miyoshi, Japanische Bergkirschen, p. 42. under *P. mutabilis*, f. *speciosa* .)

"As it came under my observation in Japan, this cherry is quick-growing and obviously short-lived. It makes a tree from 6 to 10 meters (19¾ to 32¾ ft.) tall with a trunk from 1 to 2 meters (3¼ to 6½ ft.) in girth, and has thick, spreading and ascending-spreading branches. The bark is pale gray and smooth even on quite old trees. The shoots are stout, usually with prominent lenticels, grayish at first and often passing to dull reddish purple before becoming finally pale gray. The leaves are glabrous and green, but as they open often have a more or less brownish, metallic lustre; they are ovate or rarely obovate, abruptly caudate-acuminate, double-serrate, and the teeth are long-artistate. The flowers are fragrant, everywhere glabrous, white (pinkish in the bud) and may appear before or with the leaves; the peduncle is sometimes almost wanting; usually it is from 2 to 4 centimeters (¾ to 1½ in.) long, but occasionally it is 6 centimeters (2⅜ in.) and even more in length. The scaly involucral bracts are slightly viscid, the bracts subtending the pedicels are green, obovate, glandular-ciliate and very prominent. The fruit is ovoid, black, and lustrous. In this cherry the peduncle is extremely variable in length, often on the same individual tree, but this character has no taxonomic value in this or any other Japanese species. Varieties and forms have been based on this character, which is not only inconstant, but may vary from year to year. Koidzumi has distinguished the wild plant under the name of *speciosa*, but I can not discover any differences between a series of specimens from wild trees and another from cultivated trees. Koehne says this plant is under cultivation in Europe under the name of *P. serrulata yoshino*. In Japan the vernacular name **Yoshino** is applied to *P. yedoensis*, and not to any form of *P. lannesiana*. Koidzumi gives the vernacular name of **Oh-yama-sakura** to the wild plant. The cultivated plant and its forms are known as **Oshima-zakura** or as **Sakura**." (Wilson, The Cherries of Japan, p. 45, under *P. lannesiana*, f. *albida*.)

Ranzan. (47140). "Flowers single, pink, on long, slender pedicels. This is a very pleasing form." (Wilson, The Cherries of Japan, p. 52, under *P. lannesiana*, f. *ranzan*.)

Shirayuki. (47141). A moderately large tree with numerous, closely crowded, erect-spreading branches, smooth, brown-gray twigs, yellowish brown young leaves and white flowers with hairy peduncles. Blossoming time mid-April. (Adapted from Miyoshi, Japanische Bergkirschen, p. 127, under *P. serrulata*, f. *nivea*.) "With its large flowers this distinct form resembles *P. yedoensis*,

but the bracteoles show that it belongs to *P. serrulata.* The branches are erect-spreading and the flowers white, single, or nearly so." (Wilson, The Cherries of Japan, p. 34, under *P. serrulata,* var. *pubescens,* f. *sirayuki.*)

Surugadai-nioi. (47143). A moderately large tree with brown-gray twigs, brownish red young leaves and white, fragrant flowers. Blossoming time about the end of April. (Adapted from Miyoshi, Japanische Bergkirschen, p. 132, under *P. serrulata,* f. *surugadai-odora.*) "Flowers semidouble, fragrant, nearly white, pendulous on long, slender pedicels. This is a late-flowering form." (Wilson, The Cherries of Japan, p. 51, under *P. lannesiana,* f. *surugadai-odora.*)

Taki-nioi. (47144). A medium-sized tree with spreading branches, brown-gray twigs, brown-red young leaves, flower buds with reddish tips and white, fragrant flowers. Blossoming time about the end of April. (Adapted from Miyoshi, Japanische Bergkirschen, p. 133, under *P. serrulata,* f. *cataracta.*) "Flowers single, white, and very fragrant. The vernacular name (**taki-nioi**) signifies 'fragrance from a cataract.'" (Wilson, The Cherries of Japan, p. 48, under *P. lannesiana,* f. *cataracta.*)

Ukon-zakura. (47145). "A medium-sized tree with light yellow-green flowers, the outermost petals of which are pinkish on the outer surface. Blossoming time the last of April. A subform *lutioides,* of lighter yellow-green color (**Asagi.**) is found in Kohoku. (Adapted from Miyoshi, Japanische Bergkirschen, p. 124, under *P. serrulata,* f. *luteo-virens.*) "Flowers greenish yellow, semidouble or double. This is a very striking cherry with large flowers, borne in great profusion. The Japanese names are **Ukon** and **Asagi.**" (Wilson, The Cherries of Japan, p. 56, under *P. lannesiana,* f. *grandiflora.*)

Pyrus communis (Malaceae), 47227. **Pear.** From Mustapha-Alger, Algiers. Cuttings from Dr. L. Trabut. "**Kontoula** pear from Achaia. Grafts of an early pear, which bears abundantly a very sweet little pear which is quite fragrant. This vigorous tree, which rapidly attains large dimensions, appears interesting to me. In 1914, the Botanical Station received from Greece some grafts of a pear whose fruits are much esteemed because of their earliness; in Elis and Achaia, where it is much cultivated, it bears the name of **Kontopodaroussa** or **Kontoula**; there it attains large dimensions and is remarkable for its great and regular fruitfulness. Grafted upon *Pyrus gharbiana,* a species native to Algeria

and Morocco, it made good growth in 1915. In June, 1918, the erect branches were covered with fruits. This pear is of small size, with a short peduncle, beautiful yellow, fine, sugary, fragrant flesh, not softening. It ripens in June, and is much superior to other early pears, ripening on the same date." (Trabut.)

Rubus strigosus x rubrisetus (Rosaceae), 47296. **Raspberry-dewberry.** From College Station, Texas. Plants presented by Mr. H. Ness, Horticulturist, Texas Agricultural Experiment Station. **No. 1.** A hybrid between *Rubus strigosus* (the Brilliant), a red raspberry, as the staminate parent, and *Rubus rubrisetus,* a dewberry, as the pistillate parent. The fruit is dark red to nearly black and the flavor is mildly acid, with a strong reminder of the raspberry,- very superior to the blackberry. The drupelets adhere more to the core than in the raspberry. (Adapted from the Journal of Heredity, frontispiece, vol. 9, p. 338, 1918.)

Solanum scalare (Solanaceae), 47310. From Giza Mouderieh, Egypt. Seeds presented by Mr. F. S. Walsingham, Ministry of Agriculture, Horticultural Division. A shrubby solanum found along streams on the west coast of Africa from Sierra Leone to Pungo Andongo. The stem, the leaves, and the outside of the flowers are covered with stellate pubescence. The ovate-oblong leaves have undulate margins and the white or violet flowers, half an inch across, are borne in racemose clusters of about ten. The fruits are smooth, shining red, globose berries, about half an inch in diameter. (Adapted from Thiselton-Dyer, Flora of Tropical Africa, vol. 4, sec. 2, p. 224.)

Spathodea campanulata (Bignoniaceae), 47216. **Oruru.** From Southern Provinces, Nigeria. Seeds presented by Mr. J. H. Kirby, Asst. Director of Agriculture, Ibadan. A strikingly handsome tree, 20 to 70 feet or more high, with a smooth, white stem without branches for a considerable height from the ground, and a luxuriant, conical head of foliage, all studded with large flowers of a bright orange-scarlet. One of the most beautiful trees in Angola, flowering from September to the end of May, and fruiting in June and July. Suitable for avenues or as a shade tree. Raised from seed which is winged, light, and freely distributed by the wind. (Adapted from Kew Bulletin, Useful Plants of Nigeria, Part 3, p. 509.) "A tender, rapidly growing species

killed back, in south Florida, by a temperature of +26° F. but quickly sprouting from the ground." (Fairchild.)

Strophanthus gratus (Apocynaceae), 47217. From Southern Provinces, Nigeria. Seeds presented by Mr. A. H. Kirby, Asst. Director of Agriculture, Ibadan. A handsome flowering plant; it may be propagated by seeds which are distinguished from the Strophanthus seeds of commerce (*S. kombe*) by being glabrous. The seeds of this species are recommended for use in medicine, in preference to those of any other, chiefly because they yield crystalline strophanthin, whereas the established official Strophanthus yields this glucoside in an amorphous condition. Used for poisoning arrows. (Adapted from Kew Bulletin, Useful Plants of Nigeria, Part 3, p. 447.)

Strophanthus hispidus (Apocynaceae), 47218. From Southern Provinces, Nigeria. Seeds presented by Mr. A. H. Kirby, Asst. Director of Agriculture, Ibadan. "The seeds are an important drug, worth about 2s. to 2s. 6d. (approximately 50 to 60 cents) per pound wholesale, commonly shipped in the pods, but more often taken out, freed from the awns and packed in bales. The seeds are poisonous, the active principle being strophanthin; used in Nigeria and generally in tropical Africa for arrow poison. It may be propagated by seed, but the commercial supply is obtained, so far, from wild plants,—strong fibers making the seed difficult to collect, though, according to Dalziel, as a shrub with long lax branches it is capable of being grown in the neighborhood of towns and villages. The seed pods are available in October at Abepa, Kabba Province, where the plant is said to be plentiful. The seeds take several months to ripen. Billington reports collecting in October a pod then not quite ripe, after noting its development for ten months." (Kew Bulletin, Useful Plants of Nigeria, Part 3, p. 448.)

Synsepalum dulcificum (Sapotaceae), 47219. **Agbayun.** From Southern Provinces, Nigeria. Seeds presented by Mr. A. H. Kirby, Asst. Director of Agriculture, Ibadan. "This tropical African tree flowers in the months of June, July, and August, and usually produces a number of oblong or oval berries which resemble olives; they are dull green at first but gradually change, as they ripen, into a dusky red. The seeds are enclosed in a thin, soft, slightly saccharine pulp which, when

eaten, has the peculiar property of making the most sour and acidulous substances seem intensely sweet, so that citric or tartaric acids, lime juice, vinegar, and all sour immature fruits eaten thereafter taste as if they were composed wholly of saccharine matter. The duration of this effect depends upon the amount of berries eaten, and the degree of maturity they have attained; when a sufficient quantity has been taken, their influence is commonly perceptible throughout the day. This peculiar principle, however, is soon dissipated if the fruits are allowed to remain in a ripe condition for any length of time; preserved fruits brought to England not only lost this property, but became extremely insipid. The natives of the Gold Coast often use them to render their stale and acidulated kankies (maize bread) more palatable, and to give sweetness to sour palm wine and pitto (beer made from maize.) (Adapted from Pharmaceutical Journal, vol. 11, p. 446.)

Vitex grandifolia (Verbenaceae), 47220. **Oricta.** From Southern Provinces, Nigeria. Seeds presented by Mr. A. H. Kirby, Asst. Director of Agriculture, Ibadan. Near the River Nun, *Vitex grandifolia* is a small tree with the habit of an Aralia, growing to a height of 25 feet. In Akwapim it is a shrub, 10 feet in height, with cream-colored flowers, found at an elevation of 1,000 feet. The fruit is edible, about the size of a small plum; it is made into a kind of honey. The wood is used for making large drums. (Adapted from Kew Bulletin, Useful Plants of Nigeria, Part 3, p. 526.)

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Bureau of Plant Industry.
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Washington, D. C.

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